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U.S. GEOLOGICAL SURVEY

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NATIONAL WATER QUALITY LABORATORY TECHNICAL MEMORANDUM 1997.11

July 29, 1997

To: Chief, Office of Water Quality
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Employees, National Water Quality Laboratory

From: Merle W. Shockey, Acting Chief
National Water Quality Laboratory
Branch of Analytical Services

Subject: New Approved Method for VOCs

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Revision: None

Supplemental: None

BACKGROUND

The National Water Quality Laboratory (NWQL) determines volatile organic compounds (VOCs) in water samples through a variety of schedules with differing reporting limits and lists of constituents. Recently the National Water Quality Assessment (NAWQA) Program requested a new VOC method for a large number of constituents at substantially lower reporting limits than existing methods. In response to this need, the NWQL developed a custom method that reports 86 constituents at low concentrations. This custom method is now an approved U.S. Geological Survey method.

SCOPE

Available for use by all NWQL customers, the new method (Schedules 2020 and 2021) determines 86 constituents in water samples at low concentrations. Schedule 2020 includes a search for nontarget compounds and Schedule 2021 does not include the search for nontarget compounds. Schedules 2020 and 2021 were previously available as custom Lab Codes 9090 and 9091, respectively. Please use the new Schedule numbers rather than the old custom lab codes.

Tested for the past year to determine how it behaves in production at the NWQL, this custom method underwent minor modifications and refinements. Based on extensive internal quality assurance/quality control and expert outside technical review, data produced by custom Lab Codes 9090 and 9091 on or after October 1, 1996, will be considered approved data and can be entered into WATSTORE. Data produced prior to October 1, 1996, remains provisional. Further evaluation of the VOC data collected prior to this date is planned by NAWQA's VOC National Synthesis Team, and further guidance on how these data are to be used by Study Units will be provided.

Publication of the requisite Open-file Report describing this new VOC method is expected before January 1, 1998. If you have additional questions, please contact Brooke Connor (BFCONNOR) (303)467-8170.

Impact on Data Base: None

Key words: VOC, 2020, 2021, 9090, 9091, low reporting limits

Supersedes: None

Distribution: See above plus the Netnews usgs.labnews and .water.quality, WRD Secretaries; Field and Project Offices; Hydrologic Technicians; and <http://www.nwql.cr.usgs.gov/>